DOCUMENT RESUME

ED 060 402 AC 008 320

AUTHOR	Edgar, Thomas
TITLE	Evaluation in Adult Basic Education. Heuristics of Adult Education: Courses of Study for Professional Preparation of Educators of Adults.
INSTITUTION	Colorado Univ., Boulder.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	Jun 70
GRANT	OEG-0-9-151178-4196(323)
NOTE	43p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Adult Basic Education; *Adult Education; Adult Educators; *Course Content; Data Analysis; Data Collection; *Discovery Processes; Evaluation Techniques; Goal Orientation; Objectives; *Professional Education; Program Evaluation; Research; Student Needs; Student Opinion; Tape Recordings; Teacher Attitudes

ABSTRACT

A course which grew directly from the stated needs expressed by Adult Basic Education (ABE) students and ABE teachers alike is presented. As the course was presented, the content was evaluated through analysis of tape recordings of class periods, through analysis of instructor opinion, and through the collection and analysis of the opinions of those enrolled in the class. The final course outline is the basis of the major portion of the discussion contained in this report. The three major sections of the outline are: (1) The Development of an Understanding of the Meaning of Evaluation of Adult Basic Education, (2) The Development of an Understanding of the Interrelationships among Statements of ABE Objectives, Teaching in ABE Situations, the Students Goals, His Achievement, and the Evaluation of His Progress, and (3) Students Build Examinations or Criterion Check Lists Based Upon Their Teaching-Learning Units. (For related documents, see AC 008 317-319, 321, 322.) (CK)

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED 060402

HEURISTICS OF ADULT EDUCATION

Courses of Study for Professional Preparation of Educators of Adults

edited by Vincent J. Amanna

a publication of the

REGION VIII
ADULT BASIC EDUCATION PROJECT
at the UNIVERSITY OF COLORADO

Boulder, Colorado
June, 1970

AC 008 320

EVALUATION IN ADULT BASIC EDUCATION

Thomas Edgar

The work reported herein was performed pursuant to grant number OEG-0-9-151178-4196(323) from the U.S. Office of Education, Department of Health, Education and Welfare. The opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

EVALUATION IN

ADULT BASIC EDUCATION

Thomas Edgar, Ph.D.
Idaho State University

HEURISTICS OF

ADULT EDUCATION

Courses of Study for the Professional Preparation
of Educators of Adults

PART I SEMINAR IN ADULT BASIC EDUCATION

PART II SOCIOLOGY OF IMPOVERISHED LIFE STYLES

PART III PSYCHOLOGICAL IMPLICATIONS OF DEPRIVATION ON ADULT LEARNERS

PART IV ADULT TEACHING AND LEARNING

PART V METHODS AND MATERIALS IN ADULT BASIC EDUCATION

PART VI EVALUATION IN ADULT BASIC EDUCATION

FORWARD

HEURISTICS: Serving to discover or reveal; applied to arguments and methods of demonstration which are persuasive rather than logically compelling, or which lead a person to find out for himself.

Webster's New International Dictionary of the English Language

The appropriateness of the title Heuristics of Adult Education for this series may not be apparent to the reader and we should, therefore, make clear our purposes in its preparation.

Adult education in the United States is experiencing an expansion that is to some considerable extent without precedent. The tremendous changes that followed World War II were largely manifest in increases in volume, achieving essentially the same objectives as those of the first half of this century, but with larger numbers of people. However, during the past decade a rather different adult clientele has emerged and its visibility has confronted the adult educator with questions about the adequacy of his preparation as a professional. The undereducated, economically impoverished adult has waited until only recently on the periphery of social institutions. Through the convergence of a number of related, fortunate circumstances, his plight has arisen as a prominent concern of the American educational exterprise. His social and cultural devience from the parent society has proven to be the dimension which presents the actual challenge to the adult educator and in its turn to the composition of his professional preparation. He finds that the alienation resulting from prolonged deprivation is highly resistant to amelioration through the more prosaic components of graduate study in adult education.

We are confronted with the dilemma of a double problem. On the one hand the adequacy of professional training for adult educators must be caused to accomodate the new clientele. This is not viewed at this point in time, nor in this particular project as a matter of finding substitutes for parts of the professional curriculum, but rather a concern

for enlarging competencies and understandings. On the other hand, however, there are few clear indicators of precisely what should be included; what cognitive and experiential learnings are most efficacious in relation to the objectives of graduate study.

Hence, the present project is viewed as heuristic; a clear and open invitation to everyone concerned about the competence of the professional educator of adults to discover and reveal the adequacies and shortcomings of this present effort at persuasion--a persuasion that we have discovered some guideposts in the evolution of a design for a portion of graduate study in adult education. But this is also an invitation to those who would discover where further pursuit of curriculum design for graduate study will lead, and then to share their findings with those of us who have had a part in the present project.

Vincent J. Amanna
University of Colorado
June, 1970

MEASUREMENT AND EVALUATION FOR TEACHERS IN ADULT BASIC EDUCATION

The procedures followed in the development of this course are important to note. The course grew directly from the stated needs expressed by ABE students and ABE teachers alike. Samples of both groups were interviewed extensively before the first "working" course outline was developed.

The working outline (APPENDIX) was presented to leaders in Adult Education such as Marvin Rose (State Director), Gordon Jones (local director), and Vincent Amanna (project director). Criticisms of the content and suggestions for additions and modifications were collected. The working course outline was then used as a basis, along with the additional collected data to construct the Revised Course outline (APPENDIX.) This revised outline was used as a basis for instruction in a field testing course offered during the spring semester 1970.

As the course was presented, the content was evaluated through analysis of tape recordings of class periods, through analysis of instructor opinion and through the collection and analysis of the opinions of those enrolled in the class.

The final course outline will be the basis of the major portion of the discussion contained in this report. In order to maintain the structure described in this introduction, however, the course outlines discussed here will be presented in the appendix as illustrative material.

I. A DETAILED COURSE OUTLINE

In this section of the report the Final Course Outline will be presented as developed through the stages outlined in the Introductory Statement. As each section of the outline is presented a comment will

be directed to the proposed instructor of the course regarding suggested approaches in teaching that section in the opinion of the person who was course instructor during the field trial.

A. The Development of an Understanding of the Meaning of Evaluation of Adult Basic Education.

The evaluation of Adult Basic Education is placed within the context of the history of adult education in the United States. This section will cover

1. Adult literacy in the United States prior to 1965.
2. The status of adult education since 1965.

Readings for the students numbered 1 to 5 in the appendix are suggested. Not all of the readings are to be considered as excellent or even adequate. Because of the scarcity of pertinent articles, however, all sources are included and evaluated.

The material of this section could be readily covered by the lecture-discussion method. Lecture material may be garnered from sources 6-8 in the appendix. It is felt that as an introduction to the course an outside speaker should come to the class to present the historic background to Adult Basic Education. The students in Adult Basic Education in-service courses, who also teach in ABE programs seem especially to value outside speakers, and they most especially seem to appreciate those with close association with the field.

In addition to the sources already listed, it may be valuable to recommend or require the following selections from Lanning and Many.

1. Undereducation in our American Society
2. Making the People Literate

3. Growth of School Attendance and Literacy in the United States Since 1840

4. An Illiteracy Program

B. The Development of an Understanding of the Interrelationships Among Statements of ABE Objectives, Teaching in ABE Situations, the Students Goals, His Achievement, and the Evaluation of His Progress.

1. The student should be lead through outside reading to know some of the principle stated objectives of ABE. The sources suggested for purpose are: Source 9, p. 18, source 10, pp. 5-8.

2. Within this context, the ABE teachers should try to anticipate and list in class the objectives of the ABE students with whom they work. Each student should generate a list of <u>student</u> objectives based upon his own experience and contacts. On a second sheet of paper the student should be asked to list his own objectives as a teacher in an ABE program. As a part of his assignment, the students should be asked to return to their own respective programs with both lists and to discuss them with the students in their class situations. Class discussion of the results of the individual conferences within the ABE classes will be of extreme value in assessing the accuracy with which the enrollees have estimated student goals. A comparison of student goals and teacher objectives can provide a worthwhile class discussion.

3. Students, based upon the discussion, and after reading source 14, pp. 20-41, should receive a series of lectures on the behavioral education objective and its correct statement. Chapter 5, Objectives as the Basis of All Good Measurement, in Victor Noll's Introduction to Educational Measurement is highly

recommended for student use at this time. Following the Lecture Series, the students may be asked to re-state the objectives from Section B-3 in behavioral terms.

4. A teaching-learning unit for ABE English Language Arts may be formulated as small group projects. At least two such units should be completed and duplicated so comparisons may be made in class. A framework for such teaching-learning units is included for use at this time. (Figure 1)

C. Students Build Examinations or criterion Check Lists Based Upon Their Teaching-Learning Units.

1. Evaluation of learning must be a part of instruction so that the ABE student does not contribute large blocks of his time or the time of the teacher to evaluation and measurement. Much of the instruction is on an individual basis in the ABE setting. There is little lecturing. Each student is located at his own peculiar point in competence level and in background.

Those methods for evaluation of learning which also provide for practice and further learning will be suggested to the instructor. The Lafayette Memory Drum, the Subjective Reading Inventory, and the teaching machine are suggested as worthwhile devices based upon our experiences with the field testing of this course. Evaluation is the last part of the Framework for a Teaching-Learning Unit in Section B.

The first of these techniques to be discussed is the Lafayette Memory Drum. Such a device can be procured from the Lafayette Implement Company at substantial expense to the buyer. On the other hand, a reasonable facsimile can be constructed from a cardboard box and the center tube from a roll of paper towels. The Lafayette machine is a rectangular box with a

5/

FIGURE I

FRAMEWORK FOR A TEACHING-LEARNING UNIT

I. Introductory statement
   - A. State the age, grade level, and ability grouping, if any, for which the unit is planned
   - B. Estimate the length of time that is needed for the unit
   - C. Indicate briefly the over-all plan into which this unit fits

II. Outline of objectives
   - A. State the specific concepts, memorization, expectations, facts, and generalizations that students will acquire
   - B. List the specific skills that students will develop

III. Content outline
   - A. Outline the major subject-matter content, and/or
   - B. Outline the problems to be solved, and /or
   - C. Outline a series of projects to be completed

IV. Learning activities
   - A. Initiatory activities
   - B. Developmental activities
   - C. Culminating activities

V. Materials and resources
   - A. Locate reading materials, audio-visual materials, and demonstration and experimentation materials that are needed to make the activities worthwhile.
   - B. Locate and list facilities that will be used in the school (outside the classroom) and in the community
   - C. Devise procdeures for bringing people from the community to the classroom and for taking the students into the community
   - D. Outline the procedures you will use when it is necessary for students to contact persons or to secure materials outside the classroom.

VI. Evaluation procedures
   - A. Outline the procedures you will employ to determine where students are when the unit starts
   - B. Outline the methods you will use in assisting students to measure their own progress as the unit develops
   - C. Outline the procedures you will use to measure student growth in concepts, facts, skills, and attitudes when the unit ends.

Taken from source #15

revolving drum in front. Reading material can be attached to the drum and rotated at any of a number of speeds such that whole sentences (or single words, if the material is so contructed) appear in the aperture for fixed lengths of time. This requires the student to read at a fixed rate and yields, simultaneously, a reading rate for practice and evaluation. The home-made model, also, can be used to rotate written information on the drum at a fixed rate of exposure and thus accomplish the same goal--student progress--while concomitantly obtaining an assessment of performance.

Programmed learning machines can be used for the same purposes as those suggested above and can be constructed just as easily. With a shoe box and two sections of wooden dowling, a learning evaluation device can be constructed that lends itself well to an acquisition media for such materials as the Dolch word list, teacher made spelling lists or arithmetic problems.

A third relatively unpublicized evaluation device particularly useful in the evaluation of reading performance is the Subjective Reading Inventory. A sample of the traditional instrument comprises Appendix 3 and 3a. The general principle, however, can be constructed and normed for any piece of written material of any level of difficulty (as indicated by the material in Appendix 3b and 3c). The essence of the principle involved with this instrument is that if a student can read orally, material of a specified difficulty level, and answer questions with sufficient accuracy to suggest "adequate" comprehension, he has demonstrated reading proficiency at the level selected. Previous dealings with the material in

Appendix 2, for instance, suggests that if the student's oral reading accuracy score is in excess of 98%, he is reading at the independent level. Moreover, if his comprehension score is in excess of 90%, he is comprehending at a level which is consistent with his independent oral reading level.

Accuracy scores are derived by dividing the number of error-less words read aloud by the number of words in the passage. The comprehension score is derived by subtracting the percentage-valenced errors on the comprehension test from 100%. Different levels (as well as the independent level above) are as follow:

	Comprehension	Accuracy
Independent	90%	98%-100%
Instructional	75%	95%
Frustration	50%	90%
Capacity	25%	0%-90%

Application of the technique to adult material in ABE will, of course, need to await the results of norming efforts on the part of the individual ABE instructors. The techniques above lended themselves particularly well to the ABE situation.

2. Students in the class should examine the teaching-learning units with regard to a table of specifications as described in Noll, Introduction to Educational Measurement pp. 111-117. Care must be taken in establishing acceptable minimum criteria to make certain that the emphasis in measurement and evaluation correspond to the emphasis in the unit and also the course of instruction.

3. The students should be given opportunities to develop test items for criticism by the class of the following kinds:

A. True-false

B. Multiple choice
C. Essay (subjective types)
D. Completion and short answer

Chapter 6, Introduction to Educational Measurement, Noll, is a useful reference in addition to the regular recommended test for this course (Gronlund). At this point, the students should each be required to develop a teacher made test appropriate for their individual classroom instruction (Reading selections 17, 20, 22, used as lecture sources).

D. Statistical System of Measurement and Evaluation

The students must come to understand the basic statistical system of measurement and evaluation by being faced with the need to organize, make sense of, and use the data collected through the use of classroom tests constructed in part of Section C activities specified above.

The students must demonstrate an ability to find

1. performance base lines,
2. hypothetical trials to criterion behavior,
3. frequency distributions,
4. ranges, means, standard deviations, test-re-test correlation and validity estimates.

Readings and discussion taken from source #23.

Since ABE in-service preparation is ideally practical, it is suggested that the measurement concepts considered necessary be derived directly from actual data. In this way the measurement term assumes a meaning within a framework of practical experience and grows directly from it.

In a later section, the students in the class will be asked to evaluate certain standardized tests for possible use with ABE students they teach. The concepts from this section will be necessary at that time.

E. Utilization of Standardized Instruments

In order to utilize standardized instruments wisely the student must possess a set of necessary skills and a minimum array of knowledge of test construction.

1. The student through reading and lecture presentation should have knowledge of the following concepts:

   a. test-retest reliability
   b. critierion related validity
   c. content validity
   d. the standard error of measurement
   e. item difficulty level
   f. discrimination power of items
   g. norming procedures and norm groups
   h. the percentile score and standard scores

2. The student should possess the following skills

   a. the ability to develop local norms
   b. the ability to compute percentiles
   c. the ability to accurately interpret a given score in relation to an established norm group

After a class evaluation and discussion the actual instruments should be used in class as aids to instruction and the evaluation of programs.

For practical experience, the students should be asked to evaluate and utilize the following instruments.

The tests suggested for use in this portion of the class are:

1. ABLE
2. Tests of Adult Basic Education
3. Test of Word Recognition
4. Subjective Reading Inventory
5. Test of Word Recognition Skills

The instructor can derive lectures from sources 21, Part III and Source 23. Primarily, in this section, the connection between content validity and classroom use ought to be clearly made. The formal evaluation of an instrument in terms of norms, reliability estimates, and criterion related validity should be conducted, of course. But the

relationships between the instrument and the potential use in class[10/] is the key concept to be developed.

Many standardized instruments will need to be adapted for use in the ABE setting. It is this ability to adapt the instrument to match the classroom activity (develop content validation) under progress which is needed.

F. Teaching-Learning Units

The students should put the teaching-learning units they have developed into practice in the classrooms in which they are presently involved. It is strongly recommended that the enrollees either be actively teaching in on-going ABE programs or that they be assigned a practicum experience in such a program when taking the course.

Much of the value of an in-service program derives from the relationship between the theoretical classroom activities and application to the <u>real</u> problems of the enrollees.

The principal concept of this section is that success of a program or of an instructor may be evaluated only in relation to student behaviors as measured through the use of rating scales, observation schedules, standardized tests or teacher made tests of one type or another.

It is essentially the teacher who chooses and states the objective of instruction, who designates the classroom activity to be followed, the measurement device to use and the evaluational method which follows.

Only through these terminal behaviors in the student may the teacher make adequate assessment of his own performance as teacher.

By being able to assist the ABE student under their direction to specify their own goals of instruction in behavioral terms, the teacher can (1) lead the student to a more clear conception of the

abilities, skills and knowledge he needs or wants and (2) provide a means whereby the student himself and/or the teacher can assess his progress toward his own stated goals. Through role playing in class the ABE teacher enrollees should practice the clarification and behavior specification of student provided goals.

It is suggested that the instructor have the students read and become familiar with the book The Specification and Measurement of Learning Outcomes by Payne. The instructor could also make use of, to good advantage, Blooms' Taxonomy of Educational Objectives: Cognitive Domain.

Specific measurement items, such as true-false questions, behavioral observations, rating scales and check lists, should be suggested in class discussion to evaluate the degree to which each student (in role playing above) stated goal has been achieved in a satisfactory manner.

II. CORE MATERIALS

The suggested basic texts for the course and the suggested approximate time sequences of units and textbooks are listed below:

I. Measurement and Evaluation Teaching
Norman E. Gronlund

II. Readings in Measurement and Evaluation
Norman E. Gronlund

III. Elementary Statistical Procedures
Clinton I. Chase

PROJECTED READING ASSIGNMENT
(based on 18 weekly sessions)

Weeks 1-6	Chapters 1 through 9 in class
Weeks 7-12	Parts 1 & 3 in Gronlund's text Parts 1,3,4,5, & 6 selected readings from Gronlund's book of readings Supplementary readings from ABE literature
Weeks 13-15	Parts 2, 4, & 5 Gronlund's text Parts 2, 7, & 8 Gronlund's readings Supplemental readings from ABE literature
Weeks 16-18	Development and persual of format for evaluation of individual ABE courses

III. GENERAL COMMENTS REGARDING TEACHING METHODOLOGY

The methodological considerations attendant to utilization of the outline of subject matter and course activities are numerous. Generally, it should be said that the instructor in the pilot course found the students enrolled to be substantially more like the under-educated adults that they teach than they are like the "average" college student. This is not an indictment against the students' mentality, rather, it is a fundamental difference in their outlook. They tend to be the essence of intellectualism while espousing an antiintellectualism; they are middle-class persons, while deprecating verbally the middle-class veneer; and, they affiliate (and associate) predominantly with those that they teach.

These generalizations suggested a number of limitations placed on instructor behavior which, in actuality, must guide instructor behavior and set limits for instructor expectations regarding student behavior. First, the instructor can't expect students to do a great deal of reading outside class. Instead, the instructor could expect to find greater rewards in reading the supplementary sources himself, and discussing pertinent issues with the students, expecting the students to read only key materials.

Second, the fewer things investigated of theoretical nature and the more activities performed of a practical nature, the better the quality of teacher-student involvement will tend to be.

Third, and last, the instructor can not anticipate perfect student attendance, particularly if the course is given "in-servie." ABE teachers usually have a host of outside commitments (mostly with their own students) which require a substantial portion of their time and the temporal demands are largely incapable of being scheduled.

It is the suggestion of these writers that the following sequence of activities (or a sequence similar to it) be used.

A. Have a guest lecturer who is a full-time administrative employee of ABE introduce the course. He should outline the history and present goals of ABE and inform students of the purpose of the course.

B. Move as rapidly through initial theoretical considerations regarding measurement and evaluation techniques, history, philosophy, etc. as possible, proceeding to group and individual projects, activities, and discussion.

C. Spend as much as the terminal ¼ of the course drawing activities and ideas together.

Specifically regarding the course outline, the first part would most profitably be approached by initially having a guest lecturer, assigning a few of the appropriate readings, and spending a short length of time discussing the pressing necessity for adequate measurement and evaluation programs in ABE.

The second part of the outline should begin with investigations of source materials, questioning of students' own students in ABE and course instructor insights in specifying, behaviorally, reasonable objectives for under-educated adults, the progress toward which can be evaluated (as the student is learning the skills) or normatively through the use of standardized techniques. It would be useful at this point to visit several ABE programs and interview the participants with respect to their aspirations. From this stage, the instructor can move to concommitant considerations relating to ABE students and their achievement of the objectives set forth. From this point in lecture and discussion, the group can move readily to the building of

a teaching-learning unit, the basic format for which comprises Appendix 1.

As an aside, it should be commented that the instructor might be tempted to evaluate the building of a teaching-learning unit as a waste of time. Such a view is categorically inadvisable, since in most instances encountered in this project, students had no format for instruction when they entered the course, let alone one that lended itself well to evaluation techniques. Further, the instructor should make himself immediately aware of the format for objectives (essentially a unit content outline) presented in source #14-in Part V--it should prove of great utility.

In summary, it is highly important that it be the primary business of this course to deal with the very real problems of the enrollees. Beyond almost all other kinds of teachers, the ABE teacher needs real help in evaluation. Each of his students has really unique purposes, goals and needs. Seldom will classes be large enough to allow real grouping. Ordinarily the conventional standardized instruments are totally inadequate for use in ABE settings.

Therefore, it is completely essential that theory always be tied directly and immediatley to classroom practice, ABE teachers want to know how the material being covered in class will actually help them to do a more adequate job.

Unlike the typical undergraduate education student, the ABE teacher needs and demands practical methods related closely to actual problems being faced now, in today's classroom setting.

IV. MEDIA

Because of the practical and applied nature of the course, conventional media devices may have little special relevance (opaque projectors, of course, have constant use in demonstrating test item construction, correction of technically weak items, and other situations where student or teacher work should be demonstrated to the students.

Closed circuit television can be used to good advantage in demonstrations of reading inventory use, test interpretations or administration. This device seems to free the student from some of the pressure of being directly observed and also allows for immediate playback and an immediate critique. Corrections based on feedback follow performance almost instantaneously and are therefore more valuable when practiced.

The bug-in-the-ear device allows the instructor, observing through one-way glass to offer immediate suggestions to a student involved in a project without disturbing others in the room. It is valuable for test administration practice as well as interpretation.

Generally, it is considered that conventional film strips, instructional films, and tapes are of little value in the context of this class. When they are used, they might profitably be shown outside of class time in order to allow full student participation in classroom activity. The nature of the class demands full student involvement with the rest of the class.

In the field trial no specific conventional media devices were found especially useful and therefore none are recommended. Other instructors may be ingenious with audio and visual devices and reap adequate benefit.

17/

Of course, the presentation of printed and prepared material by projector was a constant part of the class instructional procedure, but no uncommon methods were produced or used.

V. SUPPLEMENTARY READING LIST

The reading list provided below is evaluated for usefulness by the instructor of the field trial. While not all the readings are fully adequate, in many cases they are the best that could be located through resources available. The instructor has provided the following scale of evaluation:

*** Good (to be required)
** useful to the student
* adequate but marginal

Reading List

* 1. "Under-education in Our American Society". Edward W. Brice, Illinois Education Journal, May, 1963, pp. 387-389.

* 2. "An Illiteracy Program", Charles McKenny, School and Society, June 10, 1925, pp. 247-252.

** 3. "Making the People Literate", Robert T. Hill, School and Society, April 9, 1932, pp. 488-491.

* 4. "Growth of School Attendance and Literacy in the United States Since 1840", Sterling G. Brinkley, Journal of Experimental Education, September, 1957, pp. 51-66.

*** 5. "A Lifetime of Learning", Superintendent of Documents Catalog, No. FS5.213:13134, U. S. Government Printing Office, Washington: 1969.

** 6. "Adult Under-education" Frank Thompson, Jr., Adult Leadership, June, 1960, pp. 49-50.

** 7. "Illiteracy at the Crossroads", Paul Conrad Berg, Adult Leadership, June, 1960, pp. 47-54.

** 8. "Educational Rehabilitation: An evaluation of the Adult Basic Education Program of the State of Illinois," February, 1965, Greenleigh Associates, Inc., New York- Chicago.

** 9. "Abstract of a Conceptual Model of an Adult Basic Education Evaluation System", U.S. Office of Education by Management Technology, Inc, Jun, 1967, P. 18.

10. ------

*** 11. "Basic Principles in A good Teaching-Learning Situation", William H. Burton, Phi Delta Kappan, March, 1958, pp. 242-248.

** 12. "Psychological Characteristics Affecting Adult Learning", Jean B. Fay, Adult Leadership, December, 1964, pp.172 ff.

** 13. "Motivation to Learn", Corinne Kirchner, from An Overview Of Adult Education Association of the U.S.A., 1959, pp. 27-47.

*** 14. Guidelines for Teaching the Under-educated Adult, Louis Bruno, State Office of Public Instruction, Olympia, Washington.

*** 15. Teaching in The Secondary School, (3rd ed.), N.S. Blount and H.T. Klausmeier, Harper and Row, 1968, pp. 199-254.

** 16. Better Teaching in Secondary Schools, M.D. Alcorn, J.S. Kinder, and J.R. Schunert; Holt, Rinehart, and Winston, 1964, pp. 87-131.

** 17. Better Classroom Testing-Frank F. Gorow, Chandler, 1966.

* 18. Test Construction: A Programmed Guide, Lowell A. Schoer, Allyn and Bacon, 1970.

*** 19. Behavioral Objectives and Instructions, Robert J. Kibler, Larry L. Barker, and David T. Miles; Allyn and Bacon, 1970.

** 20. The Behavior Change Process, Oscar G. Mink; Harper and Row, 1968.

*** 21. Measurement and Evaluation in Teaching, Norman E. Gronlund; Macmillan, 1965, Chapters 1, 2, and 3.

*** 22. Measuring Pupil Achievement and Aptitude, C.M. Lindvall; Harcourt, Brace & World, 1967.

** 23. "Test and Measurement Kit", ETS (Western Office) Berkeley, Calif.

* 24. Adult Learning, Adult Basic Education Pre-Institute Seminar, Wayne State University, May, 1967, Conducted by National University Extension Assoc. for the Division of Adult Education Programs, U.S. Office of Education.

SOURCES USEFUL IN BUILDING TEACHING-LEARNING UNITS FOR ENGLISH AND MATHEMATICS

*** 1. "You and Your World," American Education Publishers, Education Center, Columbus, Ohio.

*** 2. "Reading Skill Builders Series (levels 1-8), Reader's Digest Services, Educational Division, Pleasantville, New York.

*** 3. "Know Your World", American Education Publications, Education Center, Columbus, Ohio.

*** 4. Curriculum Materials for Exceptional Students and Educators, Mafex Associates, 111 Barron Ave, Johnstown, PA.

*** 5. Selected reference #14, pp. 98-110.

OTHER INSTRUCTOR REFERENCES

** 1. "An Investigation of Materials and Methods for the Introductory Stage of Adult Literacy Education", Ann Hayes, Nancy Lighthall, and Dan Lupton, Adult Education Council of Greater Chicago, 332 South Michigan Avenue, Chicago, Ill.

*** 2. "Some Implications for School Practice of the Chicago Studies of Cultural Bias in Intelligence Tests", Kenneth Eells, Harvard Education Review, 23, 4, 1953, pp. 284-297.

*** 3. "The Definition and Measurement of Literacy", William S. Gray, Fundamental and Adult Education, 9-10, 3, 1957-58, UNESCO, pp. 3-8.

*** 4. "Testing Adult Basic Education Students", Joseph H. Schaffer, ABE Project, University of Colorado, Extension Division, Bureau of Class Instruction and General Adult Education, 1165 Broadway, Boulder, Colorado.

** 5. "Field Test and Evaluation of Selected Adult Basic Education Systems", Greenleigh Assoc., New York, 1966.

VI. SUGGESTED STUDENT PROJECTS

Some of the pertinent and meaningful student projects of this course may be:

1. The construction of a workable memory drum from available materials (discussed earlier).

2. The construction of a simple but useful teaching machine.

3. The development of behavioral objectives from information about aspirations and educational goals collected from students in the enrollees classes in their own words.

4. The developement of testing devices to evaluate the accomplishements of the objectives developed above. Devices of a wide variety such as rating scales, check lists, interview forms, performance rating devices, objective questions and role playing methods shoudl be used.

5. The presentation of a test interpretation in a role playing setting to a "typical" ABE student of set of test results (ability, achievement and interest) chosen by the instructor (this should demonstrate a knowledge of the standard error of measurement, standard scores, percentile rank and norm and group adequacy.)

6. Students should evaluate in writing the adequacy of instructional material to be selected by the local director. The material should be located at the appropriate interest and ability levels and should be judged for adequacy in relation to stated student goals.

7. The construction of a two way table of specifications reflecting the content of a unit of instruction or a standard test such as the GED. The various courses of instruction in their own ABE settings should be evaluated for relationship to the emphasis as described in the table derived from the standard test--or the unit should be so evaluated for relevance. (see Gronlund)

VII. PRACTICUM EXPERIENCE

The connection between classroom instruction and practical application should be clear and immediate. In this respect it seems as reported earlier, that every student enrolled be associated with an on-going and viable ABE program. The majority of students will ordinarily be teaching in ABE programs. Even for those teaching, though, the opportunities for on-site practicum experiences will generally be restricted unless special provision for such experience is built directly into the course at the outset.

Generally the local ABE director, the fellow teachers or the counselors will be especially difficult as the enrollee begins to evaluate the entire program in which he works. Personal involvement and lack of knowledge on the part of administrators or local counselors make them ineffective as supervisors of practicum supervisors.

It is strongly urged that the ABE local supervisory persons be given brief in-service preparation as on-site practicum supervisors. Their responsibilities should be made very clear. They should be asked to:

1. Fill out occasional rating scales.
2. Discuss apparent strengths and weakness discovered as possibilities by the enrollee.
3. Hold periodic conferences with the course instructors and the students during regular class periods where mutual problems may be discussed and dealt with.

But these persons should not be expected to evaluate the work of the enrollee. Their knowledge is not adequate to the task in the general case. Therefore, it is recommended that the course instructor be given compensation for practicum supervision and that the additional

time he spends be recognized as a normal part of his course load.

While local administrators or counselors could be expected to provide an on-site contact, the major portion of the practicum activity should be coordinated with classroom activities through the additional time commitment of the designated instructor.

Because the ABE teachers are so actively concerned with finding answers to pressing practical problems, all the classroom activities must be addressed to felt problems of the enrollees in a laboratory type setting.

Practicum should be a regular portion of the classroom expectation. If necessary, academic or didactic presentations may be limited or restricted in order to provide adequate opportunity for practical application. Most discussions outlined above can be "hooked to" or will grow quite naturally from the actual concerns of the students. The proposed solutions to these concerns should be applied directly in the field under the direct supervision of the instructor.

VIII. DESIGN FOR SUPERVISION, CRITIQUE & EVALUATION OF PRACTICAL FIELD EXPERIENCE.

A prime and ultimate purpose of a course in measurement and evaluation is the improvement of instruction. If the knowledge and skills gained in such a course do not result in the improvement of individual teaching and in meaningful proposals for the improvement of curriculum and program, then the course has failed to fulfill its major function.

While the supervisor of the practicum should rest as the responsibility of the course instructor, and should be recognized in his work load, he can and should be recognized in his work load, he can and should plan to enlist the efforts of the local ABE director in the evaluation of the adequacy of the practicum in meeting the needs of the program.

Every administrator of ABE programs is faced with inadequate materials and a lack of appropriate achievement tests. A real part of the practicum experience is certainly to develop evaluation devices for the kinds of educational objectives sought in ABE, and to serve some of the needs of the on-going program.

The evaluation and critiques of the practicum should be collected by the instructor of the course through interviews with the local director and samples of ABE students who have contact with the enrollee in the classroom setting. The interview should cover the following points and should be phrased suitably for the group to be interviewed:

1. To what extent have materials of appropriate difficulty, relevance and interest been introduced into the class setting?

2. To what extent have the enrollee and his students come to define adequately the behavioral goals of ABE instruction?

3. To what extent has the enrollee demonstrated an ability to relate evaluation methods to stated objectives?

4. To what extent has the enrollee demonstrated a knowledge of and use of a wide variety of testing devices in the classroom?

5. To what extent do the testing proceedures contribute to and further the learning process?

6. To what extent do the students know their level of achievement in relation to their own stated objectives?

7. To what extent has the work of the enrollee improved the quality of the over all program and the general instruction and evaluation methods in the program? (Largely a question for the local director)

The above points seem to summarize the general expected results of a good measurement and evaluation program in the classroom and in the local setting. They will serve, therefore, as a basis for evaluating the effectiveness of the course and of the practical field testing of the material gained from the instruction.

The instructor will need to estimate the relevance of the practicum experience to the didactic portion of the class, but the opinions of those directly involved in ABE will serve as a broader base for decision making.

APPENDIX

APPENDIX 1

WORKING OBJECTIVES FOR

EVALUATION IN ADULT BASIC EDUCATION

Course Objectives With Specification of Expected
Terminal Student Behaviors

I. An understanding of the interrelationship among statement of objectives, teaching, learning and evaluation.

II. A capability to use and interpret descriptive statistics relevant to the measurement of student performance.

A. Prerequisite information (e.g., f-distributions, class intervals, graphs, etc.)

B. Mean

C. Median

D. Mode

E. Percentiles & semi-interquartile range

F. Average and Standard Deviation

G. Aspects of correlation
1. reliability
2. validity
3. error of estimate and error of measurement
4. significance of difference between r's

H. Simple tests of significance of difference between means (w & w/out repeated measures) plus some basic research design and methodology.

III. Capability of assessing standardized tests available in all areas subsumed by ABE.

IV. Ability to clearly specify course objectives relevant to ABE courses with specification of ongoing and terminal student behavioral goals.

V. Ability to construct, use, and interpret results of, a teacher made test.

A. True-false

B. Multiple-choice

C. Essay subjective

D. Completion and short answer

VI. Capability to assess individual course presently taught in ABE programs (proposed project).

VII. The ability to use the results of measurement and subsequent evaluation to improve instructional programs.

Statistical Paradign: 1. Initial one-way ANOVA

2. Terminal matrix of t-tests for repeated measures (dependent t-tests) after requisite of homogenity of variances has been satisfied.

Method of Modifying On-going Course Second Semester

Procedure for
Modification of course
presented second semester:

The complete taping of each session in entirety, will be followed by a direct typescript and content analysis by identified consultants. Suggestions for modification will be collected and implemented.

APPENDIX 2

REVISED COURSE OBJECTIVES FOR ABE MEASUREMENTS AND EVALUATION

I. An understanding of the meaning of evaluation of ABE

Proposed materials: articles from Lanning and Many

1. Undereducation in Our American Society
2. An Illiteracy Program
3. Making the People Literate
4. Growth of School Attendance and Literacy in the United States since 1840

II. An understanding of the interrelationship amoung statements of ABE objectives, teaching in ABE situations, the student's achievement and the evaluation of his progress. Inclusion in this section of specification of on-going and terminal ABE student behaviors.

Proposed Materials: Text: Gronlund Chapter #1 & #2 & #3 excerpts from source booklets #4 "Abstract of Conceptual Model of an Adult Basic Education Evaluation System" and #5 "Guidelines for Teaching the Under-Educated Adult" Also materials from Employment Services and GED

III. A capability to use and interpret descriptive statistics relevant to the measurement of student performance: An approached tailored to ABE

A. Performance on aspects of the Dolch word list shown on a Lafyette Memory Drum can be used to:
1. Establish a base line for performance
2. Obtain trials to a criterion of one perfect recitation for each member of the group
3. Group data in a frequency distribution
4. Calculate the mean, median and mode
5. Calculate the range and standard deviation

b. Repeat procedure above for mathematics problems and reading comprehension, and material presently in use by ABE (The items here may be used as Individual projects). materials: lecture

IV. Acquistion of information pertinent to selection, use and interpretation of group and/or standardized instrument used in ABE.

Materials: "Tests of ABE", Calif. Test Bureau; "ABLE", Harcourt, Brace & World, Inc.; "Wais", "Subjective Reading Inventory" (Baller); Iowa Test of Intelligence (Lordge, Thorndike, Otis), Tests for Vision and Hearing: ETS booklet #3 Selecting an Achievement Test, article #5a Some Inplications for School Practice of Chicago Studies, Etc.

Lectures on test selection and usage including a discussion of resources available and statistics principles which are applicable (e.g. standard errors, reliability, validity).

V. Acquistion of ability to construct, use and interpret results of assessment techniques which are teacher contrived.

Materials: Bibliography, 1968 Summer Institute for ABE teachers, etc.: Bibliography on the Problems of Southwestern Minority Groups, etc., ETS Booklets #1 Testing Programs, Special Services, etc.
#2 Multiple Choice question, etc.
#3 Making the Classroom test, etc.
#4 Short-cut Statistics for teacher made tests
#5 ETS Builds a Test

article #6

IV. Capability to assess individual course presently taught in ABE Programs (proposed term project)

Materials: lecture and articles #7 Evaluation Tools for Adult Education

VII. Capability to utilize motivational techniques relevent to ABE pupils and to evaluate changes in teacher approach to ABE student.

Materials: "How Adults Can Learn More--Faster", "Evaluation: The Process of Stimulating, Aiding, and Abetting Insightful Action", articles #34, 35, 36, 37 11, & 11, & 12 in Basic Education for the Disadvantaged Adult.

#34 A review and Appraisal of Existing Instructional Materials for Basic Education Programs

#35 Motion Pictures and Adult Education

#36 Adults, Too, Need Field Trip Experience

#37 Methods

#11 Psychological Characteristics Affecting Adult Learning

#12 Motivation to Learn

VIII. Exposure to Elementary Clinical Evaluation Techniques

Materials: Lecture based on Arnold J. Lien's Measurement and Evaluation of Learning: A Handbook for Teachers & Procedures and Preparation for Counseling by Cottle & Downie

APPENDIX 3

PART II: SIMPLE ORAL READING SELECTION

Developing Readiness for Reading: Little Puppy thinks that he is very brave now. I wonder if he will meet someone who will really frighten him. Perhaps he will have a surprise.

Oral reading by child: Checked as suggested on instruction sheet.

The next day Puppy wanted to go	7
for another walk.	10
"You may take a little walk	16
around the barn yard fence," said	22
his mother. "But do not get in the way	31
of the little brown hen."	36
"What does the brown hen look like?"	43
asked the puppy dog.	47
"She has soft brown feathers," said	53
Mother Dog. "But she does not like dogs.	61
You will see her eating in the barn yard.	70
Do not go near the hen, or she may	77
fly at you."	81
So the little puppy went for a walk	89
around the barn yard fence.	94
Soon he saw a little bird	100
with brown feathers. It was eating	106
something on the ground. The brown bird	113
hopped in front of puppy.	118
The puppy thought, "Here is the hen	125
with the soft brown feathers. She is	132
very little. I am not afraid of her."	140
The puppy jumped at the bird.	146

The bird flew up to the roof of the barn 156

"I am big and brave," said the puppy. 164

"The hen with brown feathers is afraid 171

of me. I will go and tell my mother." 180

Comprehension of oral reading (Main Idea):

What actually happened on each of his walks which made the little puppy believe that he was very brave?
(Each time he saw something which he thought was something else and he was not scaring away what he thought he was scaring).

APPENDIX 3a

CODE FOR CHECKING ERRORS IN ORAL READING

Use the following code for checking errors in oral reading on the subjective inventory.

(1) Hesitation: If a pupil hesitates for 5 seconds on a word, pronounce it for him and draw a line through it.

Example: donkey

(2) Mispronounciation: (Substitution): Draw a line through the word or part of the word which is mispronounced and write the child's pronunciation above.

house en p
Example: mother that man

(3) Omission: Encircle omitted word or part.

Example: dog played
began walking
repay

(4) Insertion: (Additions) Place caret and write in inserted word.

then
Example: When he ∧ came.

(5) Repetition: Draw a wavy line under the word or words repeated.

Example: The boy's hat

They came to the house.

Do not consider proper names when checking errors. Do not confuse accent with real errors. Give the child the benefit of the doubt.

		Possible points	Pupil's points
2.	Noting details:		
	a. Where did the little puppy live? (He lived on a farm)	(5)	_____
	b. What did the puppy do when the fly sat on his nose and then on his ear? (He flipped it away with his paw.)	(5)	_____
	c. Where was the big flower bed? (It was in the front garden.)	(5)	_____
3.	Inferred meaning:		
	a. What makes you think that it was a a bright, sunny day? (The fly was out flying around, or The puppy wanted to go for a walk.)	(10)	_____
	b. How do you know that the little puppy had never seen a bee? (He asked his mother what a bee was, or He couldn't tell a fly from a bee.)	(10)	_____
4.	Organization:		
	a. Where did the little puppy go first? (He started to walk around the Flower bed).	(10)	_____
	b. What did the little puppy do after he had chased the fly away? (He ran back to his mother.)	(10)	_____
5.	Vocabulary: (5 points each)		
	a. farm		
	b. take care of myself		
	c. buzzing noise		
	d. flipped		
	e. paw	(25)	_____
	Total Comprehension	(100)	_____

APPENDIX 3b

ADVANCED SELECTION

CULTURAL DIFFUSION AND ADULT EDUCATION

ADULT LEADERSHIP

International adult education is a matter of interest at the moment because of the recurring crisis within and among nations. Although there are many factors to consider with regard to these crisis, the differences in educational achievement between generations and between nations, stemming as they do from an inequitable distribution of educational opportunity, are very important aspects of the crisis.

There is an inequality of opportunities for learning between races, generations, social classes, and geographical areas within every nation. The Negro in America has fewer opportunities than the white; the poor have fewer than the rich; and rural areas provide fewer opportunities than do urban centres. Because societies concentrate their educational resources at the pre-adult level, older generations are deprived of an opportunity to learn continuously throughout life; consequently, we have conflicts between generations--particularly in matters of personal and social values. Futhermore, these inequalies are differences in kind as well as in quality and degree.

If this disparity in educational opportunity persists it will continue to be one of the factors threatening world survival. To avoid disparity, it is necessary to increase the educational status of the less advantaged through the diffusion of educational technology from the more to the less developed nations. This is primarily a matter in the diffusion of culture.

II

The diffusion of culture,as Lindon notes, is "the transfer of culture elements from one society to another." This process stimulates and accelerates the growth of a culture by "removing the necessity for every society to perfect every step in an inventive series for itself." The transfer of culture elements involves the presentation of the new element, its acceptance by the receiving culture, and its ultimate intergration into the pre-exsiting culture but the way in which a new element is presented may affect its acceptance and final integration. Acceptance will depend primarily upon the immediate utility and potentiality of the trait in the host culture, while intergration rests upon the compatibility of the trait with the existing culture configuration.

The spread of a trait will first occur internally within the originating culture and then it may be diffused externally into other cultures. Internal diffusion need not be complete in order for external diffusion to occur. The frequency of contacts between cultures and the channels

of communication will influence the rate of diffusion. The particular trait itself may be an idea or an artifact and the diffusion may be an "unplanned, unconscious process" or by deliberate intent.

The methods of adult education are culture traits which have been subject to diffusion. This is evident when we examine our most familiar methods since few of these are of native invention. Adult night schools originated in England as did the idea of university extension. Correspondence instruction was invented in Berlin by a Frenchman and a German. The idea of residential adult education came from Denmark. Adult vocational education was conceived in Glasgow and born in London. Study-discussion exsisted as shaqula v'taria in Judaic society during the Mishnaic period. In each instance, diffusion was accomplished by a variety of channels of communication with the idea winning acceptance first by those engaged in education and then by the American culture, but, in the process of intergration into the culture, each was modified in various ways to make it acceptable and applicable to the situation that exsisted here.

Traits invented in a culture do not necessaruly survive internal diffusion within that culture as was the case with the American Lyceum. That some traits do not survive external diffusion even when propagated through deliberate diffusion, is illustrated by the failure of the Mechanics Institutes in New Zealand even though carried there by emigrants from England who "attempted to preserve the institutions and customs of the life they had known, determined to transport as much as they could to the country they did not know." Futhermore, although successfully intergrated into a culture, a trait may be abandoned if the original conditions have changed so that it is no longer useful. Such was the fate of the Chautauqua.

A study of the diffusion of adult education methods may require both a diachronic and synchronic approach through historic reconstruction. Such a study is something more than an intellectual excerise for through it is is possible to identify some principles which are particularly relevant to the spread of modern concepts of adult education to other countries. This will be illustrated by applying historic reconstruction to the diffusion of the idea of systematic literacy education for adults and of the adult school which was the method developed for literacy instruction. Such an analysis is relevant not only to international adult education, but also to adult education with sub-cultural groups here.

APPENDIX 3c

COMPREHENSION TEST FOR CULTURAL DIFFUSION AND ADULT EDUCATION

I. Main Idea (20 points possible)
   A. What is the essential issue which Verner intends to address in the article (Answer: diffusion of culture).

II. Details (10 points)
   A. International adult education is a matter of interest at the moment because:
      1. It is the responsibility of each adult to see that he educates himself.
      2. So many American Negroes are undereducated.
      3. Societies concentrate on educationg only their children.
      * 4. The recurring crisis within and among nations is largely a matter of differences in educational achievement.
   B. Linton has noted that cultural diffusion is essentially:
      * 1. The transfer of elements of culture across societies.
      2. A matter of economic opportunity.
      3. A problem of foreign policy.
      4. dependent on foreign aid for its utilization.
   C. The spread of a trait occurs:
      * 1. first, internally within the originating culture and then any be diffused externally.
      2. first, externally because it must be tried out.
      3. internally and externally, if it works at all.
      4. on a borrowed time basis.
   D. Rate of trait diffusion depends on:
      1. frequency of intercultural contact.
      2. channels of communication.
      * 3. Both A and B.
      4. Neither A nor B.
   E. Adult night schools originated in
      1. America
      * 2. England
      3. France
      4. Denmark
   F. Traits invented in a culture:
      1. tend to persist only in that culture.
      2. diffuse only within that culture.
      3. diffuse easily to other cultures.
      * 4. may not even survive internal diffusion.

III. Vocabulary (5 points each)

   A. cultural configuration
   B. compatibility
   C. artifact
   D. synchronic
   E. Judaic
   F. propogated

ERIC Clearinghouse
AUG 24 1970
on Adult Education